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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/680,766	10/07/2003	Francis P. Fisher	8420/12(a)	5214

7590 02/15/2005

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EXAMINER

PHAM, MINH CHAU THI

ART UNIT	PAPER NUMBER
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1724

DATE MAILED: 02/15/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/680,766

Applicant(s)

FISHER, FRANCIS P.

Examiner

Minh-Chau T. Pham

Art Unit

1724

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
  - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-22 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                        | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)               | Paper No(s)/Mail Date. ____.  |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>10/7/03</u> .   | 6) <input type="checkbox"/> Other: ____.                                    |

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 5-10, 17, 21 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over either Vaughan, Jr. (3,130,024) or Chiesl (6,641,635 B1).

Vaughan, Jr. discloses an apparatus for separating foreign matter from air comprising a primary chamber (16), a separation stack (21) mounted above the primary chamber (16), a drain pump (32) for removing liquid accumulating in the primary chamber, a vacuum chamber (14) directing the air stream from the separation stack to remove entrained droplets of moisture wherein the vacuum chamber (14) further comprises a moisture separator (24 & 26), and suction is applied to the outlet (27) to remove clean air from chamber (14). Chiesl discloses an air filtration system comprising a primary chamber (140), a separation stack (150) mounted above the primary chamber (140), a second chamber (160), a liquid trap (168) and the drain (240). It would have been obvious to a person having ordinary skill in the art at the time the invention was made to provide an apparatus for separating matter from air as taught by either Vaughan, Jr. or Chiesl in order to separate foreign matter from air in which air laden with foreign matter is entrained with a liquid and then separated from the liquid leaving a major portion of the foreign matter with the liquid.

Claims 2-4, 11-16 and 18-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over either Vaughan, Jr. (3,130,024) or Chiesl (6,641,635 B1), in view of Allen et al (5,814,115).

Claims 2-4, 11-16 and 18-20 call for the chamber comprising a perforated drain plate supporting the filter media. Allen et al disclose a filter exhaust system wherein the barrel (20) comprises a perforated drain plate (44) spaced (50) above the bottom of barrel (26) to support the filter media (42) (see col. 3, lines 1-32). It would have been obvious to a person having ordinary skill in the art at the time the invention was made to provide a filter system as taught by Allen et al in the apparatus of either Vaughan, Jr. or Chiesl in order to effectively retain particulates from the air laden stream while allowing condensed water to pass through the filter element and out the barrel through the apertures.

### ***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- Taylor, Jr. (5,296,150) discloses a water oil separator.
- Siegler (5,395,514) discloses the ultrafiltration system.
- Macy (5,149,344) discloses a multi-phase flow and separator.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Minh-Chau T. Pham whose telephone number is (571) 272-1163. The examiner can normally be reached on Mon/Tues/Thur/Fri 7:00 am - 5:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Duane Smith can be reached on (571) 272-1166. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



**Minh-Chau Pham**  
**Patent Examiner**  
**Art Unit: 1724**  
**February 11, 2005**